MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2022/2023 (TERM ID 2220)

BAC2644 – CORPORATE FINANCE

(All Sections/Groups)

8 JULY 2023
9.00 a.m. – 12.00 p.m.
(3 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 3 pages with 4 Questions.
2. Attempt all **FOUR** questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

(a) Urban's, which is currently operating at full capacity, has sales of RM47,000, current assets of RM5,100, current liabilities of RM6,200, net fixed assets of RM51,500, and a profit margin of 5 percent. The firm has no long-term debt and does not plan on acquiring any. The firm does not pay any dividends. Sales are expected to increase by 3 percent next year. If all assets, short-term liabilities, and costs vary directly with sales, determine how much additional equity financing is required for next year.

(15 marks)

(b) Assume an investment has cash flows of −RM39,700, RM21,750, RM18,500, and RM12,500 for Years 0 to 3, respectively. Calculate the NPV if the required return is 12.9 percent. Should the project be accepted or rejected?

(10 marks)

(Total: 25 marks)

QUESTION 2

(a) Consider a 4-year project with an initial fixed asset investment of RM318,000. The fixed asset has straight-line depreciation to zero over the project's life and a zero salvage value. The project has a selling price of RM23, variable costs of RM11, fixed costs of RM140,200 and a sales quantity of 70,000 units. The tax rate is 19 percent. Assume that the current sales price can change from RM23 to RM25 due to the favorable economic environment and other variables remain unchanged. Calculate the sensitivity of OCF.

(10 marks)

(b) Assume, you are undertaking a project which has fixed costs of RM49,105 per year. At 11,100 units, the operating cash flow is RM59,000. The project has no tax brackets. Calculate the new degree of operating leverage if the number of units sold rises to 13,600.

(6 marks)

Continued ...

(c) Assume you observe the following situation:

State of Economy	Probability of State of Economy	Rate of Return if State Occurs	
		Stock TM	Stock GAS
Boom	0.19	0.190	0.087
Normal	0.74	0.148	0.085
Recession	0.07	− 0.245	0.048

(i) Calculate the expected return of Stock TM and Stock GAS.

(3 Marks)

(ii) Calculate the beta of Stock TM and the beta of Stock GAS, where the market risk premium is 7.1 percent, and the risk-free rate is 4.1 percent.

(3 Marks)

(iii) Assume Stock TM's beta is greater than Stock GAS's beta by 0.64. what is the expected market risk premium.

(3 Marks)

(Total: 25 marks)

QUESTION 3

(a) Paradise Travels is an all-equity firm that has 9,000 shares of stock outstanding at a market price of RM27 a share. Management has decided to issue RM25,000 worth of debt and use the funds to repurchase shares of the outstanding stock. The interest rate on the debt will be 7.3 percent. Calculate the earnings per share at the break-even level of earnings before interest and taxes? Ignore taxes.

(10 marks)

(b) Bradley's has an inventory turnover rate of 7.6, a payables turnover rate of 11.4, and a receivables turnover rate of 12.6. Calculate the operating cycle.

(8 marks)

(c) Rossiter's currently has a cash cycle of 43.4 days. Assume the operations are changed such that the receivables period decreases by 2.6 days, the inventory period increases by 1.3 days, and the payables period increases by 3.4 days. Calculate the length of the cash cycle after these changes.

(7 marks)

(Total: 25 marks)

Continued ...

QUESTION 4

(a) You are analyzing a project with an initial cost of £45,000. The project is expected to return £12;100 the first year, £36,500 the second year, and £40,000 the third and final year. There is no salvage value. Assume the current spot rate is £.0.5540. The nominal return relevant to the project is 12 percent in the U.S. The nominal risk-free rate in the U.S. is 3.1 percent while it is 4.3 percent in the U.K. Assume that uncovered interest rate parity exists. Calculate the net present value (NPV) of this project in U.S. dollars.

(15 marks)

(b) You observe that the inflation rate in the United States is 0.92 percent per year and that T-bills currently yield 3 percent annually. Assume the international Fisher effect holds. Calculate the inflation rate to be in Australia, if short-term Australian government securities yield 4.79 percent per year.

(5 marks)

(c) Discuss the following agreement: "A U.S. bank has an agreement with a German bank to exchange $500,000 for €397,000 on the first day of each of the next three calendar quarters".

(5 marks)

(Total: 25 marks)

End of Paper